



# CLV631-3000

CLV63x

**BAR CODE SCANNERS**

**SICK**  
Sensor Intelligence.



### Ordering information

Type	Part no.
CLV631-3000	1041984

Other models and accessories → [www.sick.com/CLV63x](http://www.sick.com/CLV63x)



### Detailed technical data

#### Features

<b>Version</b>	Mid Range
<b>Connection type</b>	Cable
<b>Reading field</b>	Side (105°)
<b>Scanner design</b>	Raster scanner
<b>Focus</b>	Fixed focus
<b>Light source</b>	Visible red light (655 nm)
<b>MTBF</b>	40,000 h
<b>Laser class</b>	2 (EN 60825-1 (A2:2001-03), IEC 60825-1 : 2007-03, Ed. 2.0)
<b>Aperture angle</b>	≤ 50°
<b>Scanning frequency</b>	400 Hz ... 1,200 Hz
<b>Code resolution</b>	0.25 mm ... 0.5 mm
<b>Reading distance</b>	74 mm ... 412 mm <sup>1)</sup>
<b>Raster height, number of lines, at distance</b>	15 mm, 8, 185 mm
<b>Heating</b>	Optional

<sup>1)</sup> For details see reading field diagram.

#### Performance

<b>Bar code types</b>	All current code types, Code 39, Code 128, Code 93, Codabar, GS1-128 / EAN 128, UPC / GTIN / EAN, Interleaved 2 of 5, Pharmacode, GS1 DataBar, Telepen, MSI/Plessey
<b>Print ratio</b>	2:1 ... 3:1
<b>No. of codes per scan</b>	1 ... 20 (Standard decoder) 1 ... 6 (SMART decoder)
<b>No. of codes per reading interval</b>	1 ... 50 (auto-discriminating)
<b>No. of characters per reading interval</b>	5,000 500 (for multiplexer function in CAN operation)
<b>No. of multiple readings</b>	1 ... 99

#### Interfaces

<b>PROFINET</b>	✓
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	Function	PROFINET Dual Port (optional via external connection module CDF600-2)
<b>EtherCAT®</b>		✓
	Type of fieldbus integration	Optional over external fieldbus module CDF600
<b>Serial</b>		✓, RS-232, RS-422, RS-485
	Function	Host, AUX
	Data transmission rate	2,400 Baud ... 115.2 kBaud, AUX: 57.6 kBaud (RS-232)
<b>CAN</b>		✓
	Function	SICK CAN sensor network (Master/Slave, Multiplexer/Server)
	Data transmission rate	20 kbit/s ... 1 Mbit/s
<b>CANopen</b>		✓
	Data transmission rate	20 kbit/s ... 1 Mbit/s
<b>PROFIBUS DP</b>		✓
	Type of fieldbus integration	Optional over external fieldbus module CDF600-2
<b>DeviceNet™</b>		✓
	Type of fieldbus integration	Optional via external connection module CDM + CMF
<b>Switching inputs</b>		4 ("Sensor 1", "Sensor 2", 2 inputs via optional parameter storage CMC600 in CDB620/CDM420)
<b>Switching outputs</b>		4 ("Result 1", "Result 2", 2 outputs via optional parameter storage CMC600 in CDB620/CDM420)
<b>Reading pulse</b>		Switching input "Sensor 1", non-powered, serial interface, auto pulse, CAN
<b>Optical indicators</b>		6 LEDs (Ready, Result, laser, Data, CAN, LNK TX, Bar graph for displaying the reading rate percentage (10 LEDs))
<b>Acoustic indicators</b>		Beeper/buzzer (can be switched off, can be allocated as a result indication function)
<b>Operating elements</b>		2 buttons (choose and start/stop functions)
<b>Configuration software</b>		SOPAS ET
<b>Memory card</b>		MicroSD memory card (flash card) 512 MB, optional

### Mechanics/electronics

<b>Electrical connection</b>	1 x 15-pin D-Sub HD male connector (0.9 m)
<b>Operating voltage</b>	18 V DC ... 30 V DC
<b>Power consumption</b>	5 W
<b>Housing</b>	Aluminum die cast
<b>Housing color</b>	Light blue (RAL 5012)
<b>Front screen</b>	Glass
<b>Enclosure rating</b>	IP65 (EN 60529)
<b>Protection class</b>	III (EN 61140)
<b>Weight</b>	340 g, with connecting cable
<b>Dimensions (L x W x H)</b>	80 mm x 96 mm x 38 mm

### Ambient data

<b>Electromagnetic compatibility (EMC)</b>	EN 61000-6-3 (2001-10) / EN 61000-6-2:2005
<b>Vibration resistance</b>	EN 60068-2-6 (1995)
<b>Shock resistance</b>	EN 60068-2-27 (1993)
<b>Ambient operating temperature</b>	0 °C ... +40 °C
<b>Storage temperature</b>	-20 °C ... +70 °C

<b>Permissible relative humidity</b>	90 %, Non-condensing
<b>Ambient light immunity</b>	2,000 lx, on bar code
<b>Bar code print contrast (PCS)</b>	≥ 60 %

### General notes

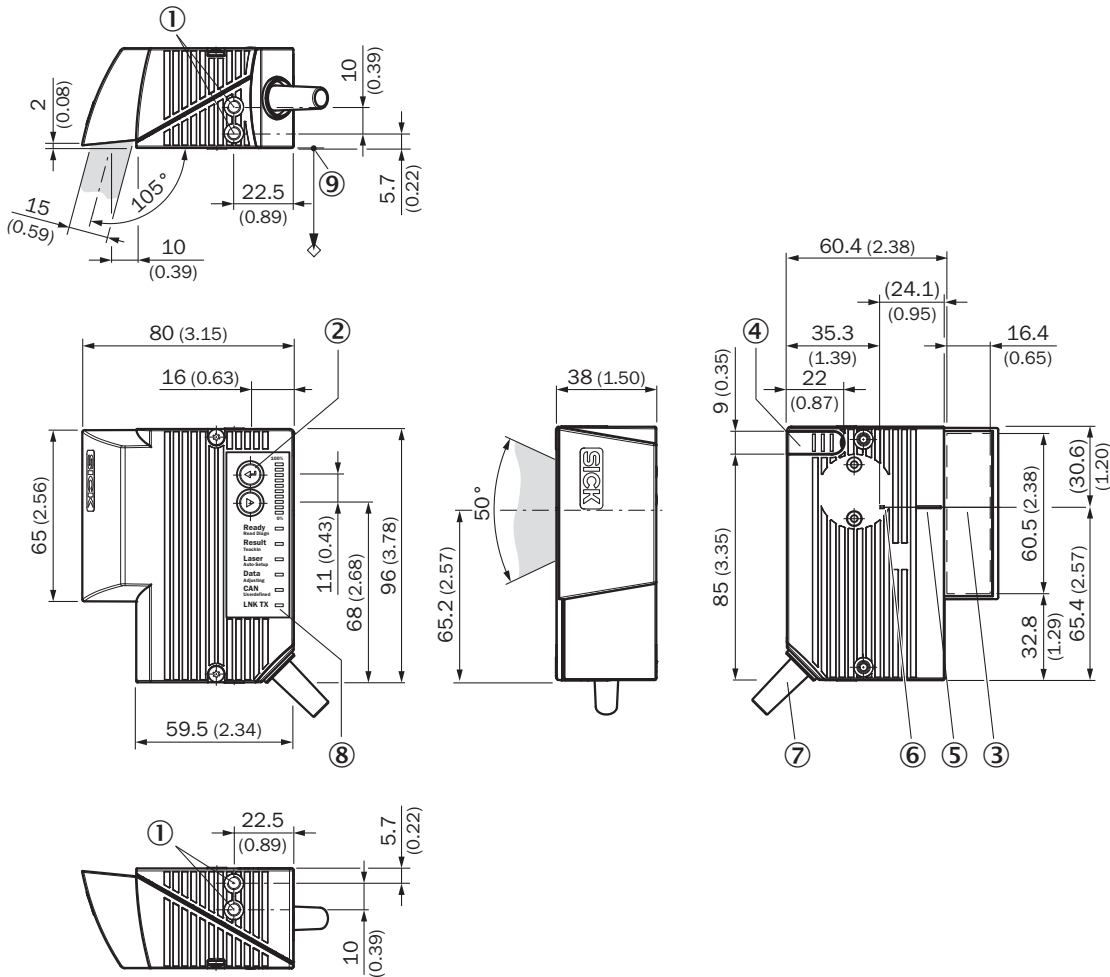
<b>Note on use</b>	For Ethernet connection please use an Ethernet version of CLV6xx
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### Classifications

<b>ECl@ss 5.0</b>	27280102
<b>ECl@ss 5.1.4</b>	27280102
<b>ECl@ss 6.0</b>	27280102
<b>ECl@ss 6.2</b>	27280102
<b>ECl@ss 7.0</b>	27280102
<b>ECl@ss 8.0</b>	27280102
<b>ECl@ss 8.1</b>	27280102
<b>ECl@ss 9.0</b>	27280102
<b>ETIM 5.0</b>	EC002550
<b>ETIM 6.0</b>	EC002550
<b>UNSPSC 16.0901</b>	43211701

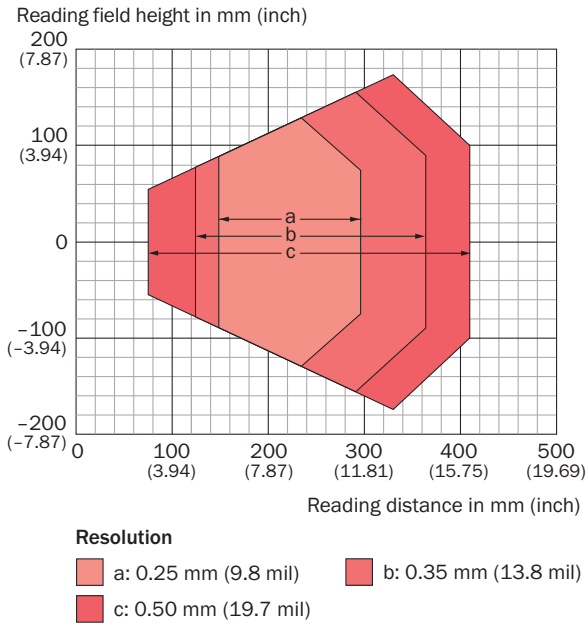
**Dimensional drawing** (Dimensions in mm (inch))

CLV63x/64x Standard, side



- ① Blind hole thread M5, 5 mm deep (2 x), for mounting
- ② Function button (2 x)
- ③ Reading field
- ④ Cover for the microSD memory card
- ⑤ Central position of the deflected laser beam in the V-shaped aperture angle
- ⑥ Internal impact point: rotation point of the variable direction laser beam
- ⑦ Cable with 15-pin D-sub HD male connector
- ⑧ LED status indicator (6x) and bar graph
- ⑨ Reference point for reading distance (from housing edge to object)

Reading field diagram



Recommended accessories

Other models and accessories → [www.sick.com/CLV63x](http://www.sick.com/CLV63x)

	Brief description	Type	Part no.
<b>Mounting brackets and plates</b>			
	Hanger-shaped mounting bracket, thermally isolated for use with heating devices, mounting hardware included	Mounting bracket	2050705
	Hanger-shaped mounting bracket, mounting hardware included	Mounting bracket	2042800
<b>Modules</b>			
	Small connection module for one sensor, 4 cable glands, base for CMC600	CDB620-001	1042256
	Modular connection module for one sensor	CDM420-0001	1025362

## SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

## WORLDWIDE PRESENCE:

Contacts and other locations –[www.sick.com](http://www.sick.com)